

As a below named inventor, I hereby declare that: My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed at 201) below or an original, first and joint inventor (if plural names are listed at 201-208 below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SEMICONDUCTOR LASER DEVICE, OPTICAL PICKUP AND FABRICATION

METHOD OF SEMICONDUCTOR LASER DEVICE

☒ the specification attached hereto.

☐ the specification in U.S. Application Serial Number _____, filed on _____

☐ the specification in PCT international application Number _____,
filed on _____; and was amended on _____.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

[illegible]

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose material information as defined in 37 CFR §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Prior U.S. Applications or PCT International Applications Designating the U.S-Benefit Under 35 U.S.C. §120				
U.S. Applications		Status (Check One)		
Application Serial No.	U.S. Filing Date	Patented	Pending	Abandoned
PCT Applications Designating the U.S.				
Application No.	Filing Date	U.S. Serial No. Assigned		

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)
(35 U.S.C. § 119(e))

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

Applicant	Provisional Application Number	Filing Date

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) with full powers of association, substitution and revocation to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Sewall P. Bronstein (Reg. No. 16,919)
David G. Conlin (Reg. No. 27,026)
George W. Neuner (Reg. No. 26,964)
Ernest V. Linek (Reg. No. 29,822)

Linda M. Buckley (Reg. No. 31,003)
Ronald I. Eisenstein (Reg. No. 30,628)
Henry D. Pahl, Jr. (Reg. No. 20,438)
Peter J. Manus (Reg. No. 26,766)

David S. Resnick (Reg. No. 34,235)
Peter F. Cortess (Reg. No. 33,860)

SEND CORRESPONDENCE TO: Dike, Bronstein, Roberts & Cushman, LLP 130 Water Street Boston, Massachusetts 02109	DIRECT TELEPHONE CALLS TO: (617) 523-3400
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2 0 1	FULL NAME OF INVENTOR	LAST NAME SHIOMOTO	FIRST NAME Takehiro	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Kashihara-shi	STATE OR FOREIGN COUNTRY Nara, Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 333-10, Ouzuku-cho	CITY Kashihara-shi	STATE OR COUNTRY AND ZIP CODE Nara, Japan

2 0 2	FULL NAME OF INVENTOR	LAST NAME NOZAKI	FIRST NAME Kenzo	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Ikoma-shi	STATE OR FOREIGN COUNTRY Nara, Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 1-39, Sakuragaoka	CITY Ikoma-shi	STATE OR COUNTRY AND ZIP CODE Nara, Japan

2 0 3	FULL NAME OF INVENTOR	LAST NAME YOSHIDA	FIRST NAME Toshihiko	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Nara-shi	STATE OR FOREIGN COUNTRY Nara, Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 25-102, 2-1, Suzaku 5-chome	CITY Nara-shi	STATE OR COUNTRY AND ZIP CODE Nara, Japan

2 0 4	FULL NAME OF INVENTOR	LAST NAME HONDA	FIRST NAME Masayuki	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Sakurai-shi	STATE OR FOREIGN COUNTRY Nara, Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 1068-6, Abe	CITY Sakurai-shi	STATE OR COUNTRY AND ZIP CODE Nara, Japan

2 0 5	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

2 0 6	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

2 0 7	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

2 0 8	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature of Inventor 201 <i>Takehiro Shiomoto</i>	Signature of Inventor 202 <i>Kenzo Nozaki</i>	INVENTOR(S) DELETED ON FILING
Date: <i>2001. 9. 25</i>	Date: <i>2001. 9. 26</i>	

Signature of Inventor 203 <i>Toshihiko Honda</i>	INVENTOR(S) DELETED ON FILING	Signature of Inventor 204 <i>Masayuki Honda</i>
Date: <i>2001. 9. 20</i>		Date: <i>2001. 9. 26</i>
Signature of Inventor 205		Signature of Inventor 206
Date:		Date:
Signature of Inventor 207		Signature of Inventor 208
Date:		Date:

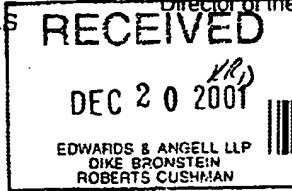


UNITED STATES
PATENT AND
TRADEMARK OFFICE

DECEMBER 14, 2001

DIKE BRONSTEIN ROBERTS & CUSHMAN
WILLIAM J. DALEY, JR.
EDWARDS & ANGELL, LLP
P.O. BOX 9169
BOSTON, MA 02209

PTAS



Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



101872727A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF
THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS
AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER
REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE
INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA
PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,
ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY,
SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/04/2001

REEL/FRAME: 012234/0676
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

SHIOMOTO, TAKEHIRO

DOC DATE: 09/25/2001

ASSIGNOR:

NOZAKI, KENZO

DOC DATE: 09/20/2001

ASSIGNOR:

YOSHIDA, TOSHIHIKO

DOC DATE: 09/26/2001

ASSIGNOR:

HONDA, MASAYUKI

DOC DATE: 09/26/2001

ASSIGNEE:

SHARP KABUSHIKI KAISHA
22-22 NAGAIKE-CHO, ABENO-KU
OSAKA-SHI
OSAKA 545-8522, JAPAN

SERIAL NUMBER: 09971207

FILING DATE: 10/04/2001

PATENT NUMBER:

ISSUE DATE:

012234/0676 PAGE 2

JEEVON JONES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

[illegible]

PATENT

101872727

Jc970 U.S. PRO
 09/971207
 10/04/01

10/04/01

IDENTIFICATION OF APPLICATION
(37 CFR 3.21 and 37 CFR 3.31(a)(4))

- a. Type of application
- ☒ Application of patent (37 C.F.R. 1.53(b))
- ☐ Continued prosecution (nonprovisional) application (37 C.F.R. 1.53(d))
- ☐ Provisional application (37 C.F.R. 1.51(c))
- ☐ International application (37 C.F.R. 1.431)

- b. Date of execution: September 20, 2001 September 25, 2001 and September 26, 2001

09/97/207

(Express Mail certification is optional.)

Fatima H. DeArruda

(type or print name of person mailing paper)

Signature of person mailing paper

***WARNING:** Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).
 "Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Cover Sheet for Assignment Accompanying New Patent Application—page 1 of 4)

49.90 CP

- c. Name of each inventor:
1: Takehiro SHIOMOTO
2: Kenzo NOZAKI
3: Toshihiko YOSHIDA
4: Masayuki HONDA

- d. Title of invention: SEMICONDUCTOR LASER DEVICE, OPTICAL PICKUP AND
FABRICATION METHOD OF SEMICONDUCTOR LASER DEVICE

NOTE: 37 C.F.R. § 3.21 states: "If an assignment of a patent application filed under § 1.53(b) is executed concurrently with, or subsequent to, the execution of the patent application, but before the patent application is filed, it must identify the patent application by its date of execution, name of each inventor, and title of the invention so that there can be no mistake as to the patent application intended. If an assignment of a provisional application under 1.53(c) is executed before the provisional application is filed, it must identify the provisional application by name of each inventor and title of the invention so that there can be no mistake as to the provisional application intended."

NAME OF PARTY(IES) CONVEYING INTEREST (37 CFR 3.31(a)(1))

2. The party(ies) conveying this interest is (are):
Name 1: Takehiro SHIOMOTO
Name 2: Kenzo NOZAKI
Name 3: Toshihiko YOSHIDA
Name 4: Masayuki HONDA

**NAME AND ADDRESS OF PARTY(IES) RECEIVING INTEREST
(37 CFR 3.31(a)(2))**

3. The rights are being conveyed to:
Name: Sharp Kabushiki Kaisha
Address: 22-22 Nagaike-cho, Abeno-ku
Osaka-shi, Osaka 545-8522 JAPAN

Telephone No.: 011 81 6 6351 4384

**DESCRIPTION OF INTEREST CONVEYED OR TRANSACTION RECORDED
(37 CFR 3.31 (a)(3))**

4. The accompanying document intends to accomplish:
☒ an assignment
☐ a security agreement.
☐ a license.
☐ a merger.
☐ a change of name.
☐ a change of address.
☐ other.

**NAME AND ADDRESS OF PARTY TO WHOM CORRESPONDENCE
SHOULD BE MAILED (37 CFR 3.31(a)(5))**

5. Please address correspondence to:

Name: William J. Daley, Jr.
Address: Dike Bronstein Roberts & Cushman
Intellectual Property Practice Group of
Edwards & Angell, LLP
P.O. BOX 9169
Boston, MA 02209
Telephone No.: (617) 439-4444

DATE ASSIGNMENT (DOCUMENT) EXECUTED (37 CFR 3.31(a)(7))

6. The attached assignment (document) was executed on September 20, 2001; September 25, 2001
and September 26, 2001.

LANGUAGE OF ASSIGNMENT (DOCUMENT) TO BE RECORDED

NOTE: "The Office will accept and record non-English language documents only if accompanied by an English translation signed by the individual making the translation." 37 CFR 3.26.

7. The attached document:

- ☒ is in the English language.
☐ is not in the English language. An English translation signed by the individual making the translation and statement as to its accuracy is attached.

ORIGINAL DOCUMENT OR TRUE COPY SUBMITTED

NOTE: "Either the original document or a true copy of the original document may be submitted for recording. Only one side of each page shall be used. The paper used should be flexible, strong, white, non-shiny, durable, and preferably no larger than 21.6 x 33.1 cm. (8½ x 14 inches) with a 2.5 cm. (one-inch) margin on all sides." 37 CFR 3.24.

8. Submitted herewith is:

- ☒ the original document.
☐ a true copy of the original document.

NOTE: "If the original [assignment] document is two-sided or the wrong size, the practitioner can comply with the requirement [set out in 37 C.F.R. § 3.24] by providing a true copy of the original document using only one side of each page on the correct size paper." Notice of June 24, 1992, 1140 O.G. 63-76, at 67.

**NUMBER OF APPLICATIONS IDENTIFIED IN THIS COVER SHEET
AND THE FEE**


NOTE: "All requests to record documents must be accompanied by the appropriate fee. Except as provided in paragraph (b) of this section, a fee is required for each application or patent against which the document is recorded as identified in the cover sheet. The recording fee is set in § 1.21(h)...." 37 CFR 3.41.

9. A. This cover sheet identifies only one application.
 B. The fee for recordal (37 CFR 1.21(h)) is \$40.00.
 [X] Attached is a check for \$40.00.
 [] Please charge Account \$40.00.
 A duplicate of this cover sheet is attached.

**STATEMENT (37 CFR 3.31(a)(9))
AND SIGNATURE (37 CFR 3.31(a)(10))**

10. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Date: October 4, 2001



Signature of Practitioner
William J. Daley, Jr. (Reg. No. 35,487)
Dike, Bronstein, Roberts & Cushman
Intellectual Property Practice Group of
PO BOX 9169
Boston, MA 02209

TOTAL NUMBER OF PAGES BEING SUBMITTED

11. The total number of pages being submitted, including cover sheet, attachment(s), and document(s) are:

6
Total number of pages submitted

ATTORNEY DOCKET NO.

ASSIGNMENT

Application No. _____

Filed _____

Insert Name(s)
of Inventor(s) ➡

WHEREAS, Takehiro SHIOMOTO, Kenzo NOZAKI,

Toshihiko YOSHIDA and Masayuki HONDA

Insert Title
of Invention ➡

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in _____

SEMICONDUCTOR LASER DEVICE, OPTICAL PICKUP AND

FABRICATION METHOD OF SEMICONDUCTOR LASER DEVICE

for which an application for Letters Patent of the United States of America has been executed by the undersigned

Insert Date
of Signing of
Application ➡

on September 20, 2001, September 25, 2001 and September 26, 2001; and

Insert Name
of Assignee ➡

WHEREAS, Sharp Kabushiki Kaisha

Insert Address
of Assignee ➡

of 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka, Japan

CHECK BOX
IF APPROPRIATE ➡

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and ☒ in any and all foreign countries.

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.



The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned hereby authorize(s) the request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

Takehiro Shimoto

Kenzo Nozaki

Toluidino Ypsilonida

Masayuki Honda

(signature)

(signature)

(signature)

(signature)

(signature)

(signature)